

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/029,733
Applicants: : Jeanine Picraux
Filed: : December 18, 2001
TC/A.U. : 2152
Examiner: : Victor Lesniewski
Title : SENDING INFORMATION USING AN IN-PROGRESS
TRANSACTION

AMENDED APPEAL BRIEF

MS APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir or Madame:

This brief is presented under 37 CFR § 41.37 in support of an appeal from a Final Office Action of January 18, 2006 regarding the above-identified application. Notice of the Appeal was filed under 37 CFR § 41.31. This brief is accompanied by the fee set forth in 37 CFR § 41.20(b)(2), as described in the accompanying TRANSMITTAL OF APPEAL BRIEF.

I. REAL PARTY IN INTEREST

The real parties in interest for this appeal are:

A. The Hewlett Packard Development Company, LP, a limited partnership established under the laws of the State of Texas having a principal place of business in Houston, TX, the assignee of the application, and a subsidiary of the Hewlett Packard Company; and

B. The Hewlett Packard Company, a corporation established under the laws of the State of Delaware and having a principle place of in Palo Alto, California.

II. RELATED APPEALS AND INTERFERENCES

Applicant is unaware of any related appeal or interference.

III. STATUS OF CLAIMS

A. Total Claims: 1-24.

B. Current Status of Claims:

1. Claims canceled: 8 and 19
2. Claims withdrawn: none
3. Claims pending: 1-7, 9-18, 20-24
4. Claims allowed: none
5. Claims rejected: 1-7, 9-18, 20-24
6. Claims objected to: none

C. Claims on Appeal: 1-7, 9-18, 20-24

IV. STATUS OF AMENDMENTS

The Applicant has not filed any amendment to the application subsequent to the Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A. Independent claim 1

Claim 1 is directed to a method for sending additional information using an in-progress data transaction from a second node to a first node. In independent claim 1, the method involves the first node to recognize when the data stream of a data transaction from a second node is invalid to stall the transaction, save the status of the transaction, insert the information request in the data stream without regards to boundary of the transaction, and resume the transaction based on the saved status.

In greater detail, claim 1 is an independent claim and recites a method claim for transmitting information from a second node to a first node (p. 5, ll. 10-22; and FIG. 1). The establishing step of independent claim 1 comprises establishing a communication link between the first node and the second node (p. 8, ll. 17-22; p. 10, ll. 17-22; and FIG. 2, 236) wherein the communication link having multiple channels (p. 6, ll. 4-14; and p. 11, ll. 3-7) for transmitting multiple data transactions (p. 6, ll. 4-12; p. 10, ll. 1-5; and p. 11, ll. 2-12). The allowing step of independent claim 1 comprises allowing one or more data transactions (p. 6, ll. 4-12; p. 10, ll. 1-5; and p. 11, ll. 2-12) transmitted on the communication link between the first node and the second node (p. 6, ll. 4-14; and p. 11, ll. 3-7). The identifying step of independent claim 1 comprises identifying a data stream of a data transaction being transmitted from the second node to the first node (p. 7, ll. 3-5). The stalling step of independent claim 1 comprises stalling the transaction at any time during the transaction (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5). The saving step of independent claim 1 comprises saving a status of the transaction at the time the transaction is stalled (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5). The inserting step of independent claim 1 comprises

inserting the information into the identified data stream without regards to a boundary of the transaction (p. 7, ll. 12-14; and p. 9, ll. 16-18). Also based on the saved status of independent claim 1, the resuming step comprises resuming the transaction (p. 8, ll. 10-14; p. 10, ll. 2-5; and p. 10, ll. 18-21), thereby transmitting the information from the second node via the data stream to the first node, wherein the information is not part of the data transaction when the data transaction starts from the second node to the first node (p. 6, ll. 16-23).

Dependent claims 2-7, which are argued together with independent claim 1, depend directly or indirectly from independent claim 1, and incorporate all of the elements of independent claim 1, as described above.

B. Independent claim 9

Claim 9 is directed to a method for sending additional information using an in-progress data transaction from a second node to a first node. In independent claim 9, the method involves the first node to recognize when the data stream of a data transaction from a second node is invalid to count the data pieces to identify the end of transaction, stall the transaction, and send the packet in the data stream.

In greater detail, claim 9 is an independent claim and recites a method for transmitting information from a second node to a first node (p. 5, ll. 10-22; and FIG. 1). The establishing step of independent claim 9 comprises establishing a communication link between the first node and the second node (p. 8, ll. 17-22; p. 10, ll. 17-22; and FIG. 2, 236). The identifying step of independent claim 9 comprises identifying a data transaction being transmitted from the second node via the communication link to the first node (p. 7, ll. 3-5); the data transaction including a header and a plurality of data pieces (p. 6, ll. 12-16; p. 8, ll.

5-9; p. 8, ll. 20-24; p. 9, ll. 16-21; and FIG. 2, 220). In independent claim 9, based on data in the header, the counting step comprises the first node counting the data pieces to identify the end of the transaction (p. 6, ll. 12-16). The stalling step of independent claim 9 comprises stalling the data transaction to send a packet including the information on the communication link to the first node (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5. Also in independent claim 9, the counting step comprises the first node counting the packet as not part of the data transaction (p. 6, ll. 19-24).

Dependent claims 10-11, which are argued together with independent claim 9, depend directly from independent claim 9, and incorporate all of the elements of independent claim 9, as described above.

C. Independent claim 12

Claim 12 is directed to a system for sending additional information using an in-progress data transaction from a second node to a first node using a communication link having multiple channels for transmitting multiple data transactions. In independent claim 12 when the first node recognizes the data stream of a data transaction from a second node is invalid, the system provides means to stall the transaction, save the status of the transaction, insert the information request in the data stream without regards to boundary of the transaction, and resume the transaction based on the saved status.

In greater detail, claim 12 is an independent claim and recites a system for transmitting information from a second node to a first node (p. 5, ll. 10-22; and FIG. 1). The system for transmitting information from a second node to a first node comprises a communication link between the first node and the second node (p. 8, ll. 17-22; p. 10, ll. 17-22; and FIG. 2, 236) wherein the communication link having, multiple channels (p. 6, ll. 4-

14; and p. 11, ll. 3-7) for transmitting multiple data transactions (p. 6, ll. 4-12; p. 10, ll. 1-5; and p. 11, ll. 2-12). In independent claim 12, the communication link transmitted one or more data transactions (p. 6, ll. 4-12; p. 10, ll. 1-5; and p. 11, ll. 2-12) between the first node and the second node (p. 6, ll. 4-14; and p. 11, ll. 3-7). In independent claim 12, a data stream of a data transaction being transmitted from the second node to the first node (p. 6, ll. 1-12; p. 9, ll. 2-8; p. 11, ll. 3-13). The means for stalling of independent claim 12 comprises means for stalling the transaction at any time during the transaction (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5). The means for saving of independent claim 12 comprises means for saving a status of the transaction at the time the transaction is stalled (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5). The means for inserting of independent claim 12 comprises means for inserting the information into the data stream without regards to a boundary of the transaction so that the information can be transmitted from the second node via the data stream to the first node (p. 7, ll. 12-14; and p. 9, ll. 16-18). The means for resuming of independent claim 12 comprises means for resuming the transaction based on the saved status (p. 8, ll. 10-14; p. 10, ll. 2-5; and p. 10, ll. 18-21), wherein the information is not part of the data transaction when the data transaction starts from the second node to the first node (p. 6, ll. 19-24).

Dependent claims 12-18, which are argued together with independent claim 12, depend directly or indirectly from independent claim 12, and incorporate all of the elements of independent claim 12, as described above.

D. Independent claim 20

Claim 20 is directed to a system for sending additional information using an in-progress data transaction having a header and a plurality of data pieces from a second node to

a first node using a communication link. In independent claim 20 when the first node recognizes the data stream of a data transaction from a second node is invalid, the system provides means to count the data pieces to identify the end of transaction, stall the transaction, and send the packet in the data stream.

In greater detail, claim 20 is an independent claim and recites a system for transmitting information from a second node to a first node (p. 5, ll. 10-22; and FIG. 1). The system for transmitting information from a second node to a first node comprises a communication link between the first node and the second node (p. 8, ll. 17-22; p. 10, ll. 17-22; and FIG. 2, 236). In independent claim 20, a data transaction being transmitted from the second node via the communication link to the first node (p. 6, ll. 4-14; and p. 11, ll. 3-7) wherein the data transaction including a header and a plurality of data pieces (p. 6, ll. 12-16; p. 8, ll. 5-9; p. 8, ll. 20-24; p. 9, ll. 16-21; and FIG. 2, 220). The means to count in independent claim 20 comprises means for the first node, based on data in the header, to count the data pieces to identify the end of the transaction (p. 6, ll. 12-16). The means for stalling in independent claim 20 comprises means for stalling the data transaction to send a packet including the information on the communication link to the first node (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5). The means to count for independent claim 20 comprises means for the first node to count the packet as not part of the data transaction (p. 6, ll. 19-24).

Dependent claims 21-22, which are argued together with independent claim 20, depend directly from independent claim 20, and incorporate all of the elements of independent claim 20, as described above.

E. Independent claim 23

Claim 23 is directed to a computer-readable medium embodying instructions for a

computer to perform a method for sending additional information using an in-progress data transaction from a second node to a first node. In independent claim 23, the method involves the first node to recognize when the data stream of a data transaction from a second node is invalid to stall the transaction, save the status of the transaction, insert the information request in the data stream without regards to boundary of the transaction, and resume the transaction based on the saved status.

In greater detail, claim 23 is an independent claim and recites a computer-readable medium embodying instructions for a computer to perform a method for transmitting information from a second node to a first node (p. 5, ll. 10-22; and FIG. 1). The establishing step of independent claim 23 comprises establishing a communication link between the first node and the second node (p. 8, ll. 17-22; p. 10, ll. 17-22; and FIG. 2, 236) wherein the communication link having multiple channels for transmitting multiple data transactions (p. 6, ll. 4-14; and p. 11, ll. 3-7). The allowing step of independent claim 23 comprises allowing one or more data transactions (p. 6, ll. 4-12; p. 10, ll. 1-5; and p. 11, ll. 2-12) transmitted on the communication link between the first node and the second node (p. 6, ll. 4-14; and p. 11, ll. 3-7). The identifying step of independent claim 23 comprises identifying a data stream of a data transaction being transmitted from the second node to the first node (p. 7, ll. 3-5). The stalling step of independent claim 23 comprises stalling the transaction at any time during the transaction (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5). The saving step of independent claim 23 comprises saving a status of the transaction at the time the transaction is stalled (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5). The inserting step of independent claim 23 comprises inserting the information into the data stream without regards to a boundary of the transaction (p. 7, ll. 12-14; and p. 9, ll. 16-18). Also in independent claim 23 based on the

saved status, the resuming step comprises resuming the transaction (p. 8, ll. 10-14; p. 10, ll. 2-5; and p. 10, ll. 18-21), thereby transmitting the information from the second node via the data stream to the first node; wherein the information is not part of the data transaction when the data transaction starts from the second node to the first node (p. 6, ll. 16-23).

F. Independent claim 24

Claim 24 is directed to a computer-readable medium embodying instructions for a computer to perform a method for sending additional information using an in-progress data transaction from a second node to a first node. In independent claim 24, the method involves the first node to recognize when the data stream of a data transaction from a second node is invalid to count the data pieces to identify the end of transaction, stall the transaction, and send the packet in the data stream.

In greater detail, claim 24 is an independent claim and recites a computer-readable medium embodying instructions for a computer to perform a method for transmitting information from a second node to a first node (p. 5, ll. 10-22; and FIG. 1). The establishing step of independent claim 24 comprises establishing a communication link between the first node and the second node (p. 8, ll. 17-22; p. 10, ll. 17-22; and FIG. 2, 236). The identifying step of independent claim 24 comprises identifying a data transaction being transmitted from the second node via the data communication link to the first node (p. 7, ll. 3-5) wherein the data transaction including a header and a plurality of data pieces (p. 6, ll. 12-16; p. 8, ll. 5-9; p. 8, ll. 20-24; p. 9, ll. 16-21; and FIG. 2, 220). Also in independent claim 24, the counting step comprises the first node, based on data in the header, counting the data pieces to identify the end of the transaction (p. 6, ll. 12-16). The stalling step of independent claim 24 comprises stalling the data transaction to send a packet on the communication link to the first

node (p. 7, ll. 14-19; p. 8, ll. 10-16; and p. 10, ll. 3-5); the packet including the information; and the first node counting the packet as not part of the data transaction (p. 6, ll. 19-24).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether or not claims 9-11, 20-22, and 24 are unpatentable under 35 USC § 102(b) over US. Patent No. 5,949,799 to *Grivna et al. (Grivna)*.

B. Whether or not claims 1-7, 12-18, and 23 are unpatentable under 35 USC § 103(a) over *Grivna* in view of U.S. Patent No. 6,748,442 to *Keller (Keller)*.

VII. ARGUMENT

A. Arguments against the rejections under 102(b) over the *Grivna*.

1. For claims 9-11, 20-22, and 24, the cited reference does not describe, teach, or suggest each and every claimed element.

The Applicant respectfully submits that the cited references do not describe, teach, or suggest an embodiment for, “stalling the data transaction to send a packet on the communication link to the first node; *the packet including the information*; and the first node counting the packet *as not part of the data transaction*” as recited in part in independent claims 9, 20, and 24, as previously presented, and incorporated into dependent claims 10-11, and 21-22 (*emphasis added*).

The Examiner has asserted that *Grivna* anticipates each and every claimed element of the limitations listed above. Applicant respectfully traverses.

Grivna discloses methods of moving data between two locations with a degree of certainty (*see Abstract*). This is accomplished, at least in part, by “embedding a response

(enabling transmission of the next packet without first waiting for complete transmission of an incoming packet)” (*id.*). Thus, commands may be inserted into an outgoing packet as soon as the command is available so as to avoid latency (*see* col. 5, ll. 1-8). Commands may be of any length and combination (*see* col. 5, ll. 17-26), but “should normally be kept as short as possible such as a single character, to keep *overhead to a minimum*,” (col. 5, ll. 35-37; *emphasis added*). Thus, *Grivna* specifically discloses methods to include instructions as part of the normal overhead of data transmission.

In contrast, the present claims specifically cite limitations in direct contradiction to *Grivna*. That is, not counting the packet as a part of the data transaction. As noted in the Specification, “[a] receiving node 110, recognizing a drop packet 1118, discards it in counting the number of data pieces in the transaction. A drop packet 1118 can be sent several times from a sending node 110 to a receiving node 110 so that the receiving node 110 is more likely to receive a valid packet 1118 (p. 6, ll. 20-25). Thus, at least one reason for not counting the packet is so that a receiving node may be more likely to receive a valid packet.

As a result, the cited reference does not describe, teach, or suggest each and every element of the Applicant’s claims 9, 20, and 24. Therefore, the Applicant respectfully requests reconsideration and withdrawal of the rejection for claims 9, 20, and 24.

Claims 10-11 and 22-24 depend directly from independent claims 9, 20, and 24 and are therefore allowable over the cited art for at least the same reasons cited for claims 9, 20, and 24.

B. Arguments against the rejections under 103(a) over the *Grivna* reference in view of the *Keller* reference.

1. For claims 1-7, 12-18, and 23, the cited references do not describe, teach, or suggest each and every claimed element.

The Applicant respectfully submits that the cited references do not describe, teach, or suggest an embodiment for “inserting the information into the identified data stream *without regards to a boundary of the transaction*; and based on the saved status, resuming the transaction, thereby transmitting the information from the second node via the data stream to the first node; *wherein the information is not part of the data transaction* when the data transaction starts from the second node to the first node,” as recited in part in independent claims 1, 12, and 23, as previously presented, and incorporated into dependent claims 2-7, and 13-18.

The Examiner has asserted that *Grivna* teaches at least some of the limitations listed above. Applicant respectfully traverses.

As noted above for claims 9, 20, and 24, *Grivna* specifically discloses methods to include instructions as part of the normal overhead of data transmission (*see* col. 5, ll. 1-8; col. 5, ll. 17-26; and col. 5, ll. 35-37). Because the present claims are directed toward transmitting information that “is not part of the data transaction,” Applicant submits that *Grivna* specifically teaches away from the claimed limitations for at least the same reasons as stated above for claims 9, 20, and 24.

Furthermore, *Grivna* discloses, “transmission of the packet characters 12 is suspended *on the next character boundary*” (col. 5, lines 62-63, *emphasis* added). Thus, an ACK command, for example, must be inserted on the next character boundary (*see id.*). In contrast, the present claims (1, 12, and 23) clearly state that information is inserted without regard to boundary. Indeed, the Specification states that “a drop packet can be forced into a

stream 135 and be sent to a receiving node at *any time during a transaction...*" (p. 7, ll. 9-10; *emphasis added*). Therefore, Applicant submits that *Grivna* specifically teaches away from the claimed limitations.

Keller discloses systems having communication links that include a variety of configurations. However, Applicant respectfully submits that *Keller* does nothing to reasonably remedy the deficiency in *Grivna*.

As a result, the cited references do not describe, teach, or suggest each and every element of the Applicant's claims 1, 12, and 23. Therefore, the Applicant respectfully requests reconsideration and withdrawal of the rejection for claims 1, 12, and 23.

Claims 2-7 and 13-18 depend directly or indirectly from independent claims 1 and 12 and are therefore allowable over the cited art for at least the same reasons cited for claims 1 and 12.

2. For claims 1-7, 12-18, and 23, it would not have been obvious to combine the cited elements from the *Grivna* reference with the cited elements from the *Keller* reference.

The Applicant respectfully submits that, at the time that the invention was made, it would not have been obvious to one of ordinary skill in the art to combine the cited elements from the *Grivna* reference with the cited elements from the *Keller* reference, as proposed in the Final Office Action.

As noted above for claims 9, 20, and 24, *Grivna* specifically discloses methods to include instructions as part of the normal overhead of data transmission (*see* col. 5, ll. 1-8; col. 5, ll. 17-26; and col. 5, ll. 35-37). Because the present claims are directed toward transmitting information that "is not part of the data transaction," Applicant submits that

Grivna specifically teaches away from the claimed limitations for at least the same reasons as stated above for claims 9, 20, and 24.

Furthermore, as noted above for claims 1, 12, and 23, *Grivna* discloses, "transmission of the packet characters 12 is suspended *on the next character boundary*" (col. 5, lines 62-63, *emphasis added*). In contrast, the present claims (1, 12, and 23) clearly state that information is inserted without regard to boundary. Therefore, Applicant submits that *Grivna* specifically teaches away from the claimed limitations.

Thus, *Grivna* is completely lacking in any motivation or suggestion to reasonably combine the cited references. From the Applicant's review, the *Keller* reference does not cure this deficiency. As a result, the Applicant submits that at the time that the Applicant's invention was made, it would not have been obvious to one of ordinary skill in the art to combine the cited elements from the *Grivna* reference with cited elements from the *Keller* reference, as proposed in the Final Office Action, to obtain the invention claimed in Applicant's claims 1-7, 12-18, and 23. Therefore, the Applicant respectfully requests reconsideration and withdrawal of the rejections for claims 1-7, 12-18, and 23.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner and/or members of the Board are invited to telephone Applicant's attorney Tuan Ngo at (408) 447-8133 to facilitate this appeal.

The Commissioner is authorized to charge any additional fees to process this Appeal Brief, or credit any over-payments that may apply, to our Deposit Account No. 08-2025.

Respectfully submitted,

/Michael J. D'Aurelio/

Michael J. D'Aurelio
Registration Number 40,977

Tel: (770) 933-9500

VIII. CLAIMS APPENDIX

1. (Previously Presented) A method for transmitting information from a second node to a first node, comprising the steps of:

establishing a communication link between the first node and the second node;

the communication link having multiple channels for transmitting multiple data transactions;

allowing one or more data transactions transmitted on the communication link between the first node and the second node;

identifying a data stream of a data transaction being transmitted from the second node to the first node;

stalling the transaction at any time during the transaction;

saving a status of the transaction at the time the transaction is stalled;

inserting the information into the identified data stream without regards to a boundary of the transaction; and

based on the saved status, resuming the transaction, thereby transmitting the information from the second node via the data stream to the first node;

wherein the information is not part of the data transaction when the data transaction starts from the second node to the first node.

2. (Original) The method of claim 1 further comprising the step of running the first node and the second node at two different frequencies.

3. (Original) The method of claim 1 further comprising the step of including instructions in the information for the first node to perform a task.
4. (Original) The method of claim 3 wherein the task includes one or a combination of resending some data, removing the first node, removing a part of the first node, restarting the first node, resetting the first node, notifying the first node, authorizing the first node.
5. (Original) The method of claim 1 further comprising the step of sending the information in a packet normally used for synchronizing the first node and the second node.
6. (Original) The method of claim 1 further comprising the step of sending the information in a packet that is not counted as part of the data stream being transmitted from the second node to the first node.
7. (Original) The method of claim 1 wherein the first node and the second node are selected from a group consisting of a computer system, a network device, a microprocessor, and an electronic chip.
8. (Canceled)

9. (Previously Presented) A method for transmitting information from a second node to a first node, comprising the steps of:

establishing a communication link between the first node and the second node;

identifying a data transaction being transmitted from the second node via the communication link to the first node;

the data transaction including a header and a plurality of data pieces;

the first node, based on data in the header, counting the data pieces to identify the end of the transaction;

stalling the data transaction to send a packet on the communication link to the first node;

the packet including the information; and

the first node counting the packet as not part of the data transaction.

10. (Original) The method of claim 9 further comprises the step of running the first node and the second node at two different frequencies.

11. (Original) The method of claim 9 further comprises the step of including instructions in the information for the first node to perform a task.

12. (Previously Presented) A system for transmitting information from a second node to a first node, comprising:

a communication link between the first node and the second node;

the communication link having multiple channels for transmitting multiple data transactions;

one or more data transactions transmitted on the communication link between the first node and the second node;

a data stream of a data transaction being transmitted from the second node to the first node; and

means for stalling the transaction at any time during the transaction;

means for saving a status of the transaction at the time the transaction is stalled;

means for inserting the information into the data stream without regards to a boundary of the transaction so that the information can be transmitted from the second node via the data stream to the first node;

means for resuming the transaction based on the saved status, wherein the information is not part of the data transaction when the data transaction starts from the second node to the first node.

13. (Original) The system of claim 12 wherein the first node and the second node run at two different frequencies.

14. (Original) The system of claim 12 wherein the information includes instructions for the first node to perform a task.

15. (Original) The system of claim 14 wherein the task includes one or a combination of resending some data, removing the first node, removing a part of the first node, restarting the first node, resetting the first node, notifying the first node, authorizing the first node.

16. (Original) The system of claim 12 wherein the information is sent in a packet normally used for synchronizing the first node and the second node.

17. (Original) The system of claim 12 wherein the information is sent in a packet that is not counted as part of the data stream being transmitted from the second node to the first node.

18. (Original) The system of claim 12 wherein the first node and the second node are selected from a group consisting of a computer system, a network device, a microprocessor, and an electronic chip.

19. (Canceled)

20. (Original) A system for transmitting information from a second node to a first node, comprising:

a communication link between the first node and the second node;

a data transaction being transmitted from the second node via the communication link to the first node;

the data transaction including a header and a plurality of data pieces;

means for the first node, based on data in the header, to count the data pieces to identify the end of the transaction;

means for stalling the data transaction to send a packet on the communication link to the first node;

the packet including the information; and

means for the first node to count the packet as not part of the data transaction.

21. (Original) The system of claim 20 wherein the first node and the second node run at two different frequencies.

22. (Original) The system of claim 20 wherein the information includes instructions for the first node to perform a task.

23. (Previously Presented) A computer-readable medium embodying instructions for a computer to perform a method for transmitting information from a second node to a first node, the method comprising the steps of:

establishing a communication link between the first node and the second node;

the communication link having multiple channels for transmitting multiple data transactions;

allowing one or more data transactions transmitted on the communication link between the first node and the second node;

identifying a data stream of a data transaction being transmitted from the second node to the first node; and

stalling the transaction at any time during the transaction;

saving a status of the transaction at the time the transaction is stalled;

inserting the information into the data stream without regards to a boundary of the transaction; and

based on the saved status, resuming the transaction, thereby transmitting the information from the second node via the data stream to the first node;

wherein the information is not part of the data transaction when the data transaction starts from the second node to the first node.

24. (Previously Presented) A computer-readable medium embodying instructions for a computer to perform a method for transmitting information from a second node to a first node, the method comprising the steps of:

establishing a communication link between the first node and the second node;

identifying a data transaction being transmitted from the second node via the communication link to the first node;

the data transaction including a header and a plurality of data pieces;

the first node, based on data in the header, counting the data pieces to identify the end of the transaction;

stalling the data transaction to send a packet on the communication link to the first node;

the packet including the information; and

the first node counting the packet as not part of the data transaction.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None